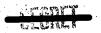
VI. CIII.

ADC INTERCEPTER INSTRUMENTATION

- 1. Recording of airborne radar information by means of photographic film and/or magnetic media is desirable.
- 2. All timing devices used on the interceptor should be synchronized with WWV prior to test activities. Radar data recordings should include the synchronized time of day information.
- 3. The F-104 interceptors will be equipped with side-winder type captive missiles during all power climb and snap up intercepts.
- 4. Documentation Interceptor pilots will complete the ADC "Controller/Interceptor Report" as accurately as possible. Particular attention will be given as to the specific Time of Day and Range to Target when the afterburner is ignited.

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Excluded iron automatic



ADC Vectoring Facility Instrumentation Requirements

- 1. Time Correlation: All data shall contain time information having one (1) second resolution (or better resolution if possible) and synchronized with WWV prior to each test series.
- 2. Test bed position (geo).
- 3. Interceptor(s) position(s) (geo).
- 4. Range test bed to interceptor(s).
- 5. Test bed heading.
- 6. Interceptor(s) heading(s).
- 7. Test bed speed.
- 8. Interceptor(s) speed(s).
- 9. Test bed altitude.
- 10. Interceptor(s) altitude(s).
- ll. Aircraft identification.
- 12. Voice recording of all communications on 1/4" magnetic tape.
- 13. Data printout (hard copy) It is required that hard copy data, be available by 0800 on the day following each test.
- 14. These provisions are required during all target detection tests.



Sortie Number AB-1A

I. Test Bed Requirements

- A. Altitude: approximately 70,000 ft.
- B. Velocity: normal cruise.
- C. Course: straight and level.

II. Interceptor Requirements

- A. Altitude: approximately 40,000 ft.
- B. Velocity: supersonic.
- C. Engine Mode: afterburning.
- D. Initiation of run: at least 30 miles aft of test bed.
- E. Course: identical to and directly under that of test bed.
- F. Termination of run: terminate as interceptor passes under test bed.

- A. One (1) F-104.
- B. One (1) F-106.
- C. One (1) other type i.e., F-4, F-101 or F-111.





Sortie Number: AB-2A

I. Test Bed Requirements

- A. Altitude: approximately 70,000 ft.
- B. Velocity: normal cruise.
- C. Course: straight and level.

II. Interceptor Requirements

- A. Altitude: approximately 40,000 ft.
- B. Velocity: supersonic.
- C. Engine mode: afterburning.
- D. Initiation of run: directly under test bed.
- E. Course: test bed course plus (+) 180 degrees.
- F. Termination of run: to be determined during run.

- A. One (1) F-104.
- B. One (1) F-106.
- C. One (1) Other Type i.e., F-4, F-101, or F-111.



Sortie Number: AB-3A

I. Test Bed Requirements

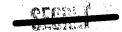
- A. Altitude: approximately 70,000 ft.
- B. Velocity: normal cruise.
- C. Course: straight and level.

II. Interceptor Requirements

- A. Altitude: approximately 40,000 ft.
- B. Velocity: supersonic.
- C. Engine mode: afterburning.
- D. Initiation of run: approximately 10 miles aft of test bed with 15 mile offset.
- E. Course: test bed course plus (+) or minus (-) 90 degrees.
- F. Termination of run: termination to be determined during test.

III. Number of Sorties Required

A. Two (2) F-104's.



Sortie Number: AB-1B

I. Test Bed Requirements

- A. Altitude: Approximately 70,000 ft.
- B. Velocity: Normal Cruise.
- C. Course: Straight and level.

II. Intercepter Requirements

- A. Altitude: Approximately 50,000 ft.
- B. Velocity: Supersonic.
- C. Engine Mode: Afterburning.
- D. Initiation of Run: At least 30 miles aft of test bed.
- E. Course: Identical to and directly under that of the test bed.
- F. Termination of Run: Terminates as intercepter passes under the test bed.

- A. Three (3) 104's.
- B. Three (3) 106's.
- C. Three (3) other types i.e, F-4, F-101 or F-111.



Sortie Number: AB-3B

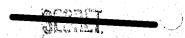
I. Test Bed Requirements

- A. Altitude: approximately 70,000 ft.
- B. Velocity: normal cruise.
- C. Course: straight and level.

II. Interceptor Requirements

- A. Altitude: approximately 50,000 ft.
- B. Velocity: supersonic.
- C. Engine mode: afterburning.
- D. Initiation of run: approximately 10 miles aft of test bed with 15 mile offset.
- E. Course: test bed course plus (+) or minus (-) 90 degrees.
- F. Termination of run: termination to be determined during test.

- A. Two (2) F-106's
- B. Two (2) other type i.e., F-4, F-101, F-111



Sortie Number AB-5B

I. Test Bed Requirements

- A. Altitude: approximately 70,000 ft.
- B. Velocity: normal cruise.
- C. Course: straight and level.

II. Interceptor Requirements

- A. Altitude: Approximately 50,000 ft.
- B. Velocity: Supersonic.
- C. Engine Mode: Afterburning.
- D. Initiation of run: Two (2) aircraft at least 30 nautical miles aft of test bed separated (wing to wing by four (4) nautical miles.
- E. Course: Each aircraft will be offset two (2) nautical miles on each side of the test bed course and parallel to that course.
- F. Termination of run: Run will be terminated when intercepter pass the 90° beam of the test bed aircraft.

- A. Two (2) Sorties of Two (2) each F-104's.
- B. Two (2) Sorties of Two (2) each F-106's.
- C. Two (2) Sorties of Two (2) each other type aircraft.



Sortie Number: AB-2B

I. Test Bed Requirements

- A. Altitude: approximately 70,000 ft.
- B. Velocity: normal cruise.
- C. Course: straight and level.

II. Interceptor Requirements

- A. Altitude: approximately 50,000 ft.
- B. Velocity: supersonic.
- C. Engine mode: afterburning.
- D. Initiation of run: directly under test bed.
- E. Course: test bed course plus (+) 180 degrees.
- F. Termination of run: to be determined during run.

- A. Three (3) F-104's
- B. Three (3) F-106's
- C. Three (3) other type i.e., F-4, F-101, or F-111.

Sortie Number AB-1C

I. Test Bed Requirements

- A. Altitude: approximately 70,000 ft.
- B. Velocity: normal cruise.
- C. Course: straight and level.

II. Interceptor Requirements

- A. Altitude: Co-altitude with test bed aircraft (approximately 70,000 ft.)
- B. Velocity: supersonic.
- C. Engine Mode: afterburning.
- D. Initiation of run: at least 30 miles aft of test bed.
- E. Course: Identical to that of test bed aircraft.
- F. Termination of run: Terminate as interceptor passes under test bed.
- III. Number of Sorties Required by Aircraft Type.
 - A. Two (2) F-104's.

Sortie Number: AB-2C

I. Test Bed Requirements

- A. Altitude: Approximately 70,000 ft.
- B. Velocity: Normal Cruise.
- C. Course: Straight and level.

II. Intercepter Requirements

- A. Altitude: Commensurate for optimum attach in a plus (+) or minus (-) 40 degree sector of the test bed aircraft.
- B. Velocity: Supersonic.
- C. Engine Mode: Afterburning.
- D. Initiation of Run: As required.
- E. Course: Power climb into plus (+) or minus (-) 40 degrees aft sector of test bed.
- F. Termination of run: As required due to capabilities of interceptor or when interceptor passes test bed aircraft.

- A. Six (6) F-104's
- B. Six (6) F-106s
- C. Three (3) other type i.e., F-4, F-101, or F-111.



Approved For Release 1999/09/07 : CIA-RDP71B00293R000200320024-7



Sortic Number AB-3C

I. Test Bed Requirements

- A. Altitude: Approximately 70,000 ft.
- B. Velocity: Normal Cruise.
- C. Course: Straight and level.

II. Interceptor Requirements

- A. Altitude: "Overshoot" test bed altitude by 3,000 to 6,000 feet.
- B. Velocity: Supersonic.
- C. Engine Mode: Afterburning.
- D. Initiation of run: As required.
- E. Course: Power climb into plus (+) or minus (-) 40 degrees aft sector of test bed.
- F. Termination of run: As required due to capabilities of intercepter or when intercepter passes test bed aircraft.

III. Number of Sorties Required by Aircraft Type

A. Two (2) F-104's



Sortie Number: AB-4C

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I. Test Bed Requirements

- A. Altitude: Approximately 70,000 ft.
- B. Velocity: Normal Cruise.
- C. Course: straight and level.

II. Intercepter Requirements

- A. Altitude: Commensurate for optimum attack in a plus (+) or minus (-) 40 degree sector of the test bed aircraft.
- B. Velocity: supersonic.
- C. Engine Mode: afterburning.
- D. Initiation of run: Two (2) aircraft will be separated (wing to wing) by four (4) nautical miles.
- E. Course: Power climb for each aircraft in the described position and envelope.
- F. Termination of run: Run will be terminated when intercepter passes the 90° beam of the test bed aircraft.

III. Number of Sorties Required by Aircraft Type

A. Two (2) Sorties of Two (2) F-104's/